



Semi-Annual Report Shutdown and Malfunction Report Arecibo Municipal Solid Waste Landfill

January to June 2019

Prepared by: Landfill Technologies of Arecibo, LLC

Landfill Technologies of Arecibo, LLC **Shutdown and Malfunction Report** January to June 2019

Arecibo Municipal Solid Waste Landfill

Shutdow	Shutdown	Description	Corrective Action
1/2/2019	No Alarm	The system was shutdown to work the reconnection of a gas wellheads.	The reconnection of the gas wellheads was made and the system was restarted and was kept on operation throughout the day as expected.
1/5/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.
1/11/2019	No Alarm	Lateral Pipe broke	The pipe was repaired and the system was restarted and was kept on operation throughout the day as expected.
1/25/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.
1/29/2019	No Alarm - Stop	Thermocouple tested.	After completing the tests of the thermocouples, the system was restarted and was kept on operation throughout the day as expected.
1/30/2019	No Alarm - Stop	Flares tests	After completing the tests of the Flares, the system was restarted and was kept on operation throughout the day as expected.
2/22/2019	No Alarm - Stop	Flow meters tests.	After completing the tests of the Flow meters, the system was restarted and was kept on operation throughout the day as expected.
2/26/2019	No Alarm- Stop	Scaffolding removal	The scaffoldings used for the tests were removal and the system was restarted and was kept on operation throughout the day as expected.
2/28/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.
2/28/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.
3/1/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.
3/9/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.
3/10/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.
3/13/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.
3/14/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.
3/27/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.
4/2/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.
4/3/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.
4/15/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.
4/15/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.
4/19/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.

Landfill Technologies of Arecibo, LLC Shutdown and Malfunction Report

January to June 2019
Arecibo Municipal Solid Waste Landfill

4/29/2019	No Alarm - Stop	Disconnection of lateral pipe 6" to relocated.	When the disconnection was completed, the system was restarted and was kept on operation throughout the day as expected.
5/5/2019	Flare Temperature High	Thermocouple damaged	The thermocouple was replaced and the system was restarted and was kept on operation throughout the day as expected.
5/10/2019	No Alarm- Stop	Regular Maintenance to the condensate pump	The maintenance was completed and the system was restarted and was kept on operation throughout the day as expected.
5/13/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.
5/16/2019	Air Low Pressure	Low Pressure of compressed air to the system	The air was re-established and the system was restarted and was kept on operation throughout the day as expected.
5/27/2019	No Alarm- Stop	Regular Maintenance to the gas line	The maintenace was completed and the system was restarted and was kept on operation throughout the day as expected.
5/28/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.
6/7/2019	Low Temperature	Possible low flow rate registered	The system was inspected and was restarted and was kept on operation throughout the day as expected.



Semi-Annual Report Shutdown and Malfunction Report Arecibo Municipal Solid Waste Landfill

July to December 2019

Prepared by: Landfill Technologies of Arecibo, LLC

Landfill Technologies of Arecibo, LLC **Shutdown and Malfunction Report**

July to December 2019
Arecibo Municipal Solid Waste Landfill

Shutdown Date	Shutdown	Description	Corrective Action
8/12/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.
8/20/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.
8/27/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.
9/7/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.
9/11/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.
9/17/2019	Flare Fault	This was caused by a pipe line was disconnected and caused intrusion of air to the gas line and the electrical generator that use landfill gas as fuel, turned off and the power failure.	The pipe line was reconnected and the system was restarted and was kept on operation throughout the day as expected.
9/17/2019	Flare Fault	8" Header pipe line broke	The header pipe line was repaired and the system was restarted and was kept on operation throughout the day as expected.
9/19/2019	No Alarm- Stop	The system turned off to installed a new instrument.	The instrument was installed and the system was restarted and was kept on operation throughout the day as expected.
9/27/2020	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.
9/30/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.
10/1/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.
10/2/2019	Flare Fault	Air instrusion to the landfill gas pipe line that was disconnected.	The pipe line was identified, connected and the system was restarted and was kept on operation throughout the day as expected.
10/4/2019	Flare Fault	Air instrusion to the landfill gas pipe line that was disconnected.	The pipe line was identified, connected and the system was restarted and was kept on operation throughout the day as expected.
10/7/2019	Flare Fault	Air instrusion to the landfill gas pipe line that was disconnected.	The pipe line was identified, connected and the system was restarted and was kept on operation throughout the day as expected.
10/11/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.
11/4/2019	No Alarm- Stop	Regular Maintenance to the 8" header line	The maintenance was completed and the system was restarted and was kept on operation throughout the day as expected.
11/9/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.
12/3/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.
12/22/2019	Flare Fault	This was caused by power failure of electricity.	The energy was re-established and the system was restarted and was kept on operation throughout the day as expected.